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Samsung Electronics America

Samsung Tech Talk

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New 2012 Smart Washer/Dryer Videos on SPSN

Jeff Brutman

Senior Staff, Publications

SPSN, Samsung's Product Support Network, has added six new Smart Washer/Smart Dryer videos to the list of its online offerings. Covering the WF455, WF457, and DV457, these videos demonstrate, in an easy to understand, step by step fashion, such topics as connecting the WF455's Smart Control in AP or WPS mode and using the WF457 Smart Control feature with the Outdoor setting.

While these videos are designed for consumers, they can provide you with substantial insight into how to implement and use these functions. In addition, they give you a resource that you can direct customers to for easy to understand but detailed explanations of how to set up and use the Smart Control functions.

The six videos are listed below by product, with live links to each video in the right hand column.

Product	Video		Link to Web Page
WF455	Using Smart Control Feature with Outdoor Setting - Smart Washer		http://support-us.samsung.com/spsn/howto.jsp?channelId=1100&scheduleId=8434
WF455	Connecting Smart Control in WPS Mode: Indoor Setting - Smart Washer		http://support-us.samsung.com/spsn/howto.jsp?channelId=1100&scheduleId=8435
WF455	Connecting Smart Control in AP Mode: Indoor Setting - Smart Washer		http://support-us.samsung.com/spsn/howto.jsp?channelId=1100&scheduleId=8436
WF457	Using Smart Control Feature with Outdoor Setting - Smart Washer		http://support-us.samsung.com/spsn/howto.jsp?channelId=1100&scheduleId=8432
WF457	Using Smart Control Feature with Indoor Setting - Smart Washer		http://support-us.samsung.com/spsn/howto.jsp?channelId=1100&scheduleId=8433
DV457	Using Smart Control Feature with Indoor Setting - Smart Dryer		http://support-us.samsung.com/spsn/howto.jsp?channelId=1100&scheduleId=8438

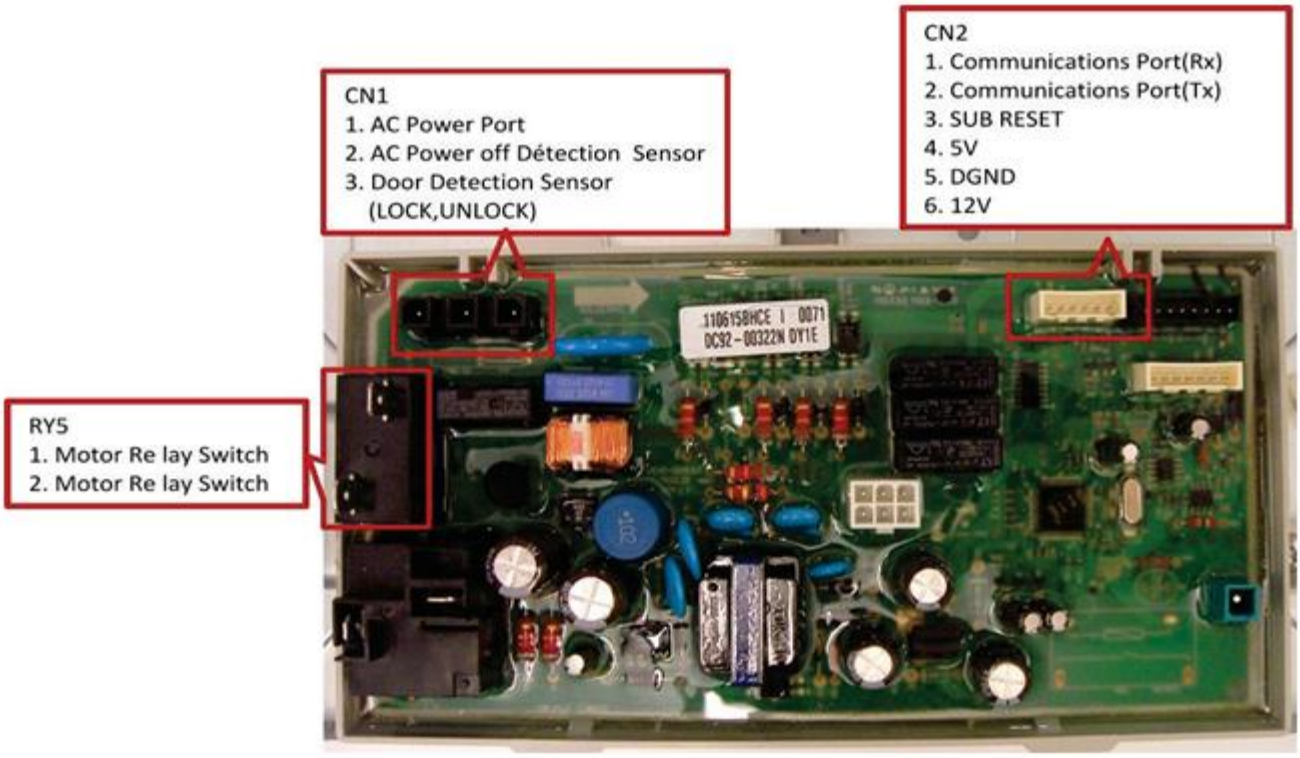
View them today.

No Power Problem on DV520 Dryers

Wes Sirois
Assistant Manager, HA Product Support

If you have replaced the Main PCB on a DV520 and the unit does not turn on, check the RY5 connector. You can connect the RY5 connector in two ways. If the connector is connected the wrong way, the control panel will not activate.

The failure to turn on occurs after you have replaced the Main PCB.



No Power Problem on DV520 Dryers

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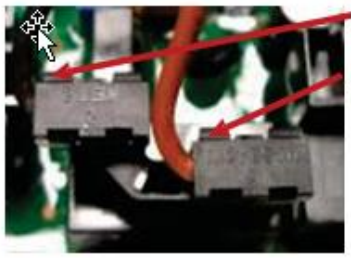
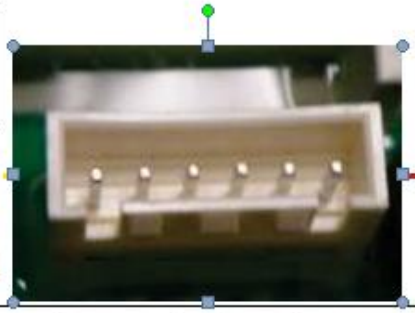
Correct Main PCB Installation



Black wire (left)

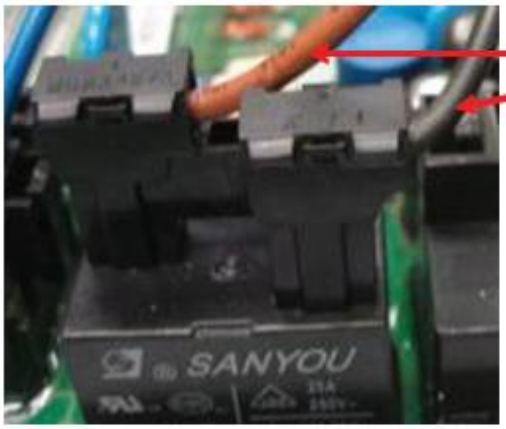
Brown wire (right)



Take a voltage reading from the Black wire to ground. It should be about 120 VAC.

Take a voltage reading from the CN2 connector. Pins 5 and 6 should read about 12 VDC. Pins 4 and 5 should read about 5 VDC.

Incorrect Main PCB Installation



Brown wire (left)

Black wire (right)

If you connect the RY5 connection incorrectly, you will not get a voltage reading from CN2. This could be mistaken for a failed Main PCB.

No Power Problem on DV520 Dryers

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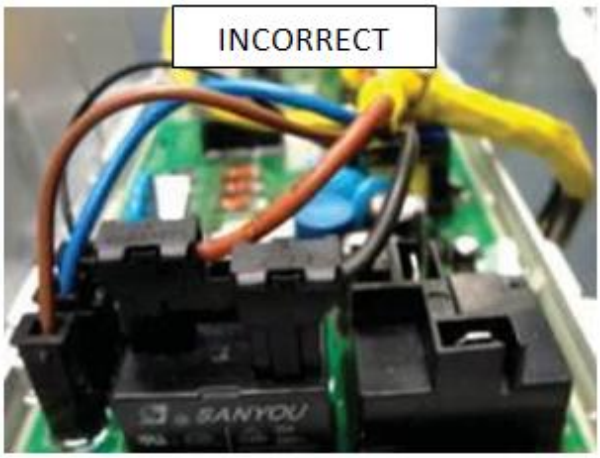
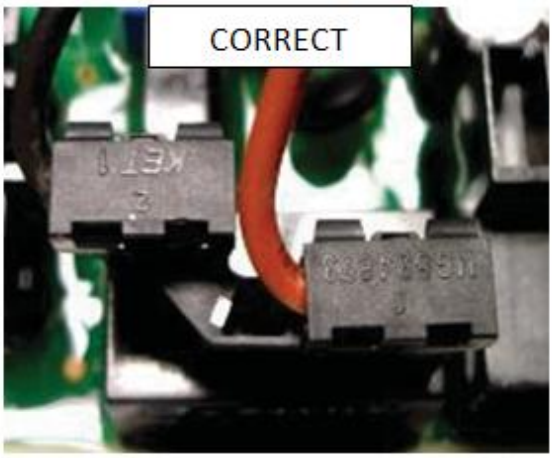




When you connect the RY5 connector correctly, the black wire is on the left side of the relay and the brown wire is on the right side. If you get no power, first verify that power is being supplied to the unit. Then, check the RY5 connection to make sure power is being supplied to the Main PCB. If power is being supplied, check the CN2 connector. If you get normal readings, check the sub PCB. If these readings are not normal, verify that the RY5 connector is connected properly. If the connections are correct, change the Main PCB.

Please Send Us Your Comments!

Something you'd like to see in the Samsung Tech Talk Newsletter? If there a topic/issue we haven't covered that you'd like us to write about, **LET US KNOW!**

Please send your comments to:

training@sea.samsung.com

Quick Diagnoses for a Defrost Circuit Failure

Steve Polzin
HA Tech Support Specialist

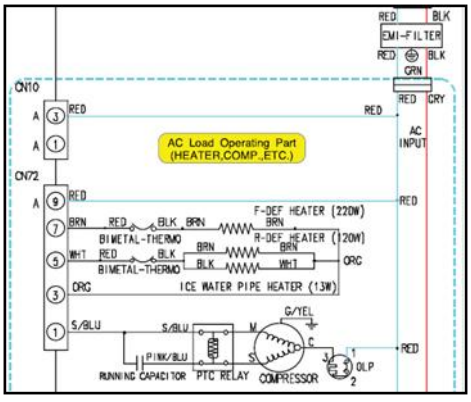
Samsung refrigerators use the adaptive defrost method to achieve frost free operation. Adaptive defrost simply means the refrigerator will defrost based upon need up to three times in a 24 hour period for the R room and 2 times for the F room. The main PCB calculates compressor run time, door cycles, ambient temperatures, and the length of previous defrost cycles, and then chooses the optimum number of defrosts based on that data. Adaptive defrost provides the greatest energy efficiency and is standard with most refrigerators produced today.

Accurately diagnosing a defrost failure in any Samsung refrigerator is a relatively easy process. The defrost circuits for the refrigerator and freezer compartment are virtually the same. If you follow the procedure and use the diagram provided as a reference, you will be able to apply the diagnostic procedure to all models. Once your diagnostic procedure has led you to a potential defrost failure, we recommend you remove the evaporator cover so you can visually confirm your findings, and then make the appropriate measurements. Always be sure to make a distinction between a frozen defrost drain (clear ice extending down to the drain trough) or an evaporator that is not defrosting (heavy frost from top to bottom of the evaporator) before diagnosing defrost operation failure. Clear Ice indicates the defrost circuit is working but not draining. Also, make sure you take your measurements before manually defrosting the evaporator coil as the defrost sensor needs to remain frozen for reliable testing.

Diagnoses and Repair

With the evaporator cover removed, locate the three Molex connectors present on all models. The wire colors may vary, but the placement will be the same on all models.

The top plug is the thermal fuse or bimetal depending on the model. Every defrost circuit will incorporate one or the other and both parts serve the same purpose and are wired in series with the defrost heater. This thermal protection is necessary to provide a thermal break for the heater circuit in the event the relay on the main PCB fails in the closed position. The thermal fuse/ bimetal will open the heater circuit if the evaporator temperature rises to approximately 130 degrees F. The thermal fuse or bimetal should always be in the closed position. If you find that it is open, replace the failed component and also replace the defrost thermistor. The defrost thermistor should be replaced because the sensor is feeding back incorrect information causing the defrost heater to stay on too long.



The middle plug is the defrost heater (brown wires). The range of resistance when you check the refrigerator defrost heater will vary between 80-150 ohms depending on the size and design of the cooling system. The lower the resistance, the hotter the heater. Expect to see 80 to 100 ohms for SXS units and 100 to 150 for French door and bottom mount models. When checking freezer defrost heaters, expect to see 45 to 65 ohms of resistance.

The bottom plug is the thermistor (usually yellow wires) and should be measured before manually defrosting. This will allow you to see the same resistance the micro processor is seeing when the unit goes into defrost. An average

Quick Diagnoses for a Defrost Circuit Failure

continued

reading should be between 20k and 40k ohms which converts to a temp range between +14 and -14 degrees, indicating a good sensor.

Accurately evaluate your measurements. If the thermal fuse or bimetal and heater check good, your problem will be either the sensor or the main PCB. If the sensor checks good, your diagnostic procedure indicates main PCB failure. Replace the main and the sensor. If the sensor checks bad, just replace the sensor.

When testing these sensors, it is important that they be tested in circuit. We also recommend you replace the defrost sensor when ever servicing all defrost failures regardless of the diagnosis. For example, if you find an open thermal fuse, also replace the sensor; if you find an open heater, also replace the sensor, etc.

Why Would You Do This?

Defrost sensors are mounted on the evaporator coil and expand and contact as temperatures fluctuate between -20 during cooling mode and 50/60 in defrost. Also, they are always wet. Moisture can infiltrate the sensor leading to intermittent operation and inconsistent test results. Therefore, it always a good service practice to replace it during the repair of a defrost circuit failure.

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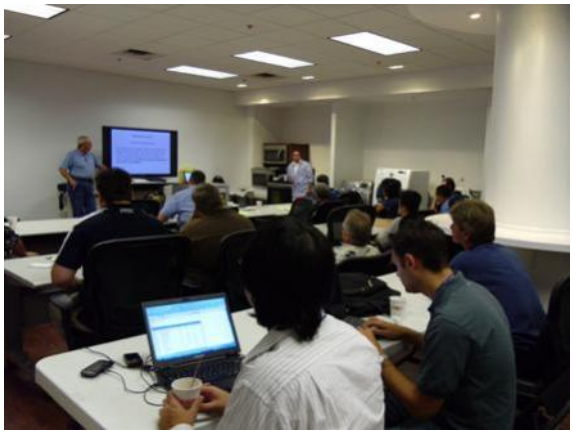
The information in this bulletin is published for experienced repair technicians only and is not intended for use by the public. It does not contain warnings to advise non-technical individuals of possible dangers in attempting to service a product. Only experienced professional technicians should repair products powered by electricity. Any attempt to service or repair the product or products dealt with in this information by anyone else could result in serious injury or death. Information provided in this bulletin is subject to change or update without notice.

2012 RTC Home Appliance Training

Samsung HA Training 2012
Being held at one of our Regional Training Centers!



For 2012, Samsung introduces a new way of training. To help you with your demanding schedule, updated training on new 2012 products will be two days long. To be eligible to attend the two day training session, techs must have attended and successfully completed 2011 HA product training in one of our training centers.

Samsung will still hold 3 day Basic classes quarterly. These classes are intended for new techs who have never attended a Samsung training, or for techs who need extra help to improve their skills.

For a limited time, we will be holding classes in our Los Angeles and Atlanta area training centers. Act now as these classes will not be held regularly at this location!

Attend the in-depth, hands-on 2 day Update or 3 day Basic training at one of our RTCs!

You can reserve your seat in training by emailing training@sea.samsung.com.

Additionally, Home Appliance training is available on-demand 24/7 at https://my.plus1solutions.net/clientPortals/samsung/

Training Schedule

Date	City	Comments
July 10-12, 2012	Little Ferry, NJ	ME/ASC 2012 3 day Basic Training
July 31, 2012	Jacksonville, FL	HA Training at NESDA Convention
July 31-August 2, 2012	Bensenville, IL	ME/ASC 2012 3 day Basic Training
August 14-15, 2012	Little Ferry, NJ	ME/ASC 2012 2 day Update Training—Session 1
August 16-17, 2012	Little Ferry, NJ	ME/ASC 2012 2 day Update Training—Session 2
August 21-22, 2012	Austell, GA	ME/ASC 2012 2 day Update Training—Session 1 **Class Full!**

2012 RTC Home Appliance Training

continued

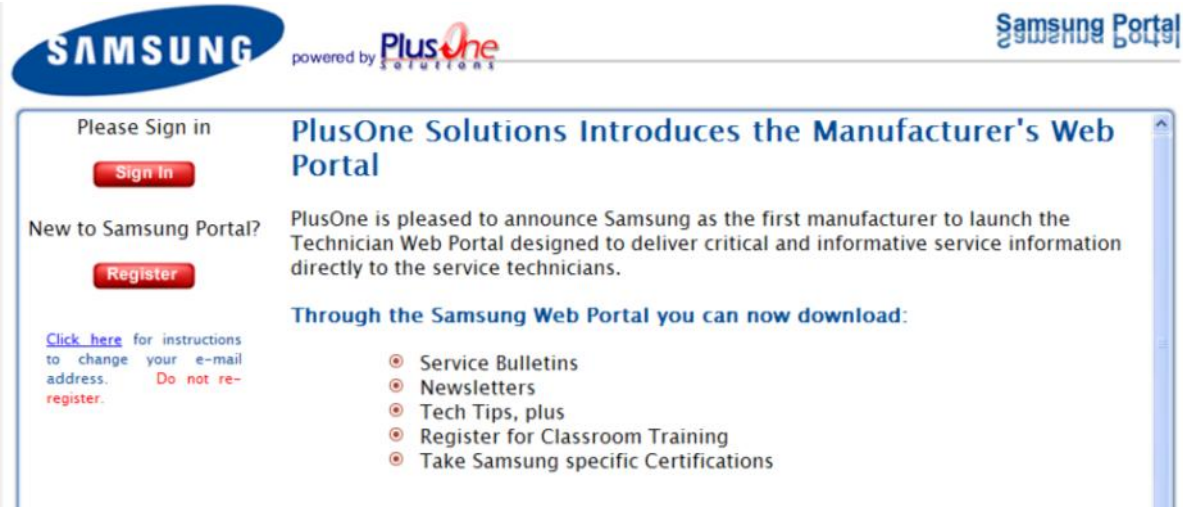
Date	City	Comments
August 23-24, 2012	Austell, GA	ME/ASC 2012 2 day Update Training—Session 2 **Class Full!**
August 28-29, 2012	Rancho Dominquez, CA	ME/ASC 2012 2 day Update Training—Session 1
August 30-31, 2012	Rancho Dominquez, CA	ME/ASC 2012 2 day Update Training—Session 2
August 28-29, 2012	Bensenville, IL	ME/ASC 2012 2 day Update Training—Session 1
August 30-31, 2012	Bensenville, IL	ME/ASC 2012 2 day Update Training—Session 2

2012 Home Appliance Training Now On-Line on Plus 1!

Jim Foster
Manager, Training /Publications

Samsung is pleased to announce that 2012 Appliance Certification courses are now online. Keep your skills up–to-date on our latest models! Go on line and take a course today.

Click here to access Plus 1: https://my.plus1solutions.net/clientPortals/samsung/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Register
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PlusOne Solutions Introduces the Manufacturer's Web Portal
PlusOne is pleased to announce Samsung as the first manufacturer to launch the Technician Web Portal designed to deliver critical and informative service information directly to the service technicians.
Through the Samsung Web Portal you can now download:
Service Bulletins
Newsletters
Tech Tips, plus
Register for Classroom Training
Take Samsung specific Certifications

The 2012 HA on-line certification training is divided into seven courses:

2012 Samsung Refrigerator Troubleshooting Guide (Video - Released 4.30.2012)

2012 Samsung Refrigerator with New Icemaker Training (Video - Released 4.30.2012)

2012 Samsung Wi-Fi Dryer Training (Video - Released 4.30.2012)

2012 Samsung Wi-Fi Washer Training (Video - Released 4.30.2012)

2012 Samsung Laundry Troubleshooting Guide Training (Video - Released 4.30.2012)

2012 Samsung Top Load Washer Training (Video - Released 4.30.2012)

2012 Induction Range Training (Video - Released 04.30.2012)

These classes are essential to maintaining your skill set on 2012 Appliance products. Stay on the top of your game. Attend an on-line class today!